## **ABSTRACT**

A method of manufacturing a gas barrier film coated plastic container with high gas-barrier properties by solving a problem in a conventional method wherein the formation of a gas barrier film is obstructed by water molecules adsorbed in the plastic container and the container with reduced gas-barrier properties is manufactured. The method is characterized by comprising the steps of decreasing a pressure inside the plastic container or decreasing a pressure to the entire part of the plastic container, flowing dry gas as leak gas when vacuum is released to fill the inside of the container with the dry gas for drying the plastic container, replacing the gas inside the plastic container with a material gas or a material gas-containing gas, and plasmatizing the material gas to form the gas barrier film on the inner surface of the plastic container by a CVD method.